

## **Southern Division Code Application**

## Kenai

 For gas piping and appliance installation, use the International Mechanical Code (2006 Edition), the International Fuel Gas Code (2006 Edition), and the Uniform Plumbing Code (2009 Edition).

## Soldotna

- For gas piping and appliance installation, use the International Mechanical Code (2006 Edition) and the Uniform Plumbing Code (2006 Edition).
- Note, both Kenai and Soldotna have received deferrals from the State Fire Marshals Office, for code enforcement and plan review.
- Outside the city limits of Kenai and Soldotna, for a 3 plex and smaller, gas piping and appliance installation use the Uniform Plumbing Code (2009 Edition). State Statute 8 AAC 63.010. This is under the State Department of Labor, Mechanical Inspection office.
- Outside the city limits of Kenai and Soldotna, for a 4 plex and larger, gas piping and appliance installation use the International Mechanical Code (2006 Edition), the International Fuel Gas Code, chapters 6 and 7 only, and the Uniform Plumbing Code (2009 Edition). State Statute 13 AAC 50.023 and 13 ACC 50.24 This is under the State Fire Marshal plan review.

## **Enstar Policy That Applies to All Divisions**

- 1. Domestic gas-fired clothes dryers may be installed in bathrooms if provided with a make-up air opening having an area of not less than 100 square inches. Generally this is provided by cutting off the appropriate length off the bottom of the bathroom door.
- **2.** Appliances shall not be installed in a location where subject to physical damage unless protected by barriers.
- **3.** In garage installation, if the equipment platform is a minimum of 24" high and the equipment does not extend beyond the face of the platform, barriers are not required.
- **4.** If the equipment is installed in an alcove, a barrier will not be required as long as the equipment does not protrude beyond the face of the wall and the height of the alcove platform, measured from the floor to the top of the platform, is a minimum of 24" in height.
- 5. If the equipment platform is less than 24" high, one or more barriers must be installed.
- **6.** The barriers must be a minimum 30" high and be constructed of a minimum 2" diameter schedule 40 iron pipe.
- **7.** The barrier must have a minimum of 6" setback from the platform or equipment. The maximum unprotected distance shall not exceed five feet.
- **8.** The barrier must be installed per one of the following methods: a. Buried a minimum of 2' deep in compact soil and imbedded in concrete slab. b. Set in a minimum 1' x 1' square x 1' deep block of concrete ( slab included). c. Secured to a wood framed garage floor with flange and stainless steel bolts and imbedded in concrete slab. d. Secured to the concrete slab using a floor flange with minimum of four 3/8" diameter x 3 1/2 " long galvanized or stainless steel bolts.

- **9.** Piping and ductwork is not allowed to be surface mounted on the face of the platform, where it may be subject to damage.
- 10. Unit heaters and related piping shall be mounted clear of any potential vehicle damage.
- **11.**Combustion Air grill shall not be covered with less than ½ inch mess for residential and up to 1 inch for commercial applications.
- **12.** Combustion Air shall not be taken from a cold attic.
- **13.** Any vent termination including combustion air, shall not be less than 24 inches from finished grade. This keeps it 12 inches above the anticipated snow depth of 12 inches. Measurements shall be made to the bottom of the vent outlet.
- 14. Fuel gas appliances that have components that generate a glow, spark, or flame (such as switches, electrical receptacles, thermostats, dryers, furnaces, boilers, water heaters, pumps, zone valves, motors etc.) that are located in spaces of a building where flammable vapors may accumulate due to leakage or spills from fuel tanks of motorized equipment, must have such ignition sources elevated at least 18 inches above the floor. Exceptions 1. Habitable portions of a private dwelling unit separated from the attached garage, by one-hour protection on the garage side, with a self closing, gasket all around, rated door. 2. Areas of a building that are separated by a minimum one hour occupancy separation protection with a vestibule type room providing a two doorway separation with self closing, gaskets all around, rated doors, from spaces accessible by motorized equipment containing combustible fuels. Note, bathrooms, toilet room's closets, hallways, storage or utility spaces, and similar areas are not considered habitable spaces.
- **15.** Overhead heaters installed in aircraft storage or servicing areas shall be at least 10' above or away from the upper surface of wings or engine enclosures of the tallest aircraft which may be housed in the hanger. Exception: Where a 10' vertical separation cannot be maintained in a NFPA 409 Class 3 hangar, a sealed com
- **16.** An appliance installed in wet under floor crawl spaces is prohibited. An exception is a FAF suspended from the floor joists above water line.
- **17.** All joints in underground ferrous piping shall be welded when, the nominal pipe diameter is 2 1/2 inch or larger, or the pipe is installed under a driveway, or medium gas pressure is used.
- **18.** All joints in underground copper shall be brazed with wrought copper fittings. No underground joints shall be permitted unless the underground length of run exceeds 60'. All pipe to tubing transitions shall be made above ground.
- **19.** Where unions are necessary, right and left nipples and couplings shall be used. Ground joint unions may be used at exposed fixture, appliance, or equipment connections and in exposed exterior locations immediately on the discharge side of a building shut off valve.
- 20. At all points where fuel gas piping enters or leaves the ground there shall be installed, above ground, an approved, listed connector, capable of absorbing a six inch displacement, in any direction, due to frost heave action. A Dormont, series 30 or 31, stainless steel flex is an example of a suitable connector. For medium pressure CSST will be considered a suitable connector.
- **21.** At points where copper tubing type systems enter or leave the ground, they shall be protected from frost heave action by the incorporation of suitable above ground 6 inch radius bends or approved flex connection of equal size.
- **22.** Pound to inches regulators serving mobile homes (trailer kits) and connected to copper tubing shall be attached directly to the inlet connection on the exterior of the mobile home, and shall not be located under the mobile home. The kits must be installed with 12" extension so as the regulator is above the skirting.
- **23.** All building fuel gas piping entrances and exits shall be located above grade or in an approved vented vault.

- **24.** Plastic and copper gas piping shall have at least 18 inches of earth cover or other equivalent protection.
- **25.** Air pressure used to test piping shall be at 10 psig and the test shall be performed with gauges of 1/10 psi increments or less.
- **26.** Welded pipe shall be tested at not less than 60 psig test pressures.
- 27. Temporary gas approval is given to allow "comfort heating" appliances to be used to provide temporary heat to a building or building site prior to the completion of the building's primary heating system. The most commonly used appliance is a natural gas portable space heater. Other comfort heat appliances allowed for temporary heat purposes are warm air furnaces, boilers, and unit heaters. It is not the policy of Enstar Natural Gas to allow "decorator fireplaces" or "ranges" to be utilized as temporary heat for buildings. These appliances are not designed or "listed" for that purpose.
- **28.** All appliances used to provide temporary heat for buildings shall be installed in accordance with the manufacturers' instructions and terms of their listing, with particular attention being paid to the clearances to combustibles from the top, bottom, front, back, and sides of these appliances.
- **29.** Unit heaters used for temporary heat shall be installed per manufacturer's instructions and listed clearances to combustibles from the top, bottom, front, back, and sides of these appliances.
- **30.** Unit heaters used for temporary heat shall be installed per manufacturer's instructions and listed clearances to combustibles. The vent connector must be graded at ¼ inch per foot slope upward to the outside and it must be changed to "B" vent at the wall penetration. The "B" vent must maintain its listed clearance to combustibles, extend a minimum of 5 feet vertically, and be secured.
- **31.** Furnaces used for temporary heat must comply with the same requirements as for unit heaters as stated above. In addition, the return air for the furnace shall be ducted a minimum of 10 feet from the furnace.
- **32.** Portable space heaters must be provided with 100% outside air to the back end of the heater. In most cases, the gas regulator attached to these heaters must be piped to the outside. If the regulator vent discharges, it shall not be allowed to discharge into the space being heated.
- **33.** Gas hose used for temporary heaters shall be an approved type. All manufacturers' listed clearances shall be maintained. The hose shall have an internal wire mesh or braid and be "kink proof". Supporting wire shall run the full length of the hose. Each time a hose is moved from one lot to another, it must be retested with 60 psig air pressure, for 10 minutes.
- 34. A permit and inspection will not be required for residential temporary construction heat serving tented footings and foundations. This provision is for thawing ground and curing concrete, not comfort heat for construction workers, i.e. plumbers, electricians, sheet rockers etc. This allowance is limited to portable 'SURE FLAME' type heaters and not intended for unit heaters, furnaces, and boilers, which have special venting considerations. All heaters and hoses must be of the approved type. Heaters must be listed by an approved listing agency. All hoses must have an internal wire mesh or braid, and be "kink proof". Supporting wire shall run the full length of the hose. 100% outside air must be provided to heater at all times. Listed clearances to combustibles must be maintained. A licensed journeyman plumber or gasfitter must perform all work. This is not intended for the home owner building his own home, and is not qualified to perform such work.
- **35.** Installation of unvented appliances is prohibited. Regardless if listed for such use.

- **36.** Venting systems installed exterior to the building outside the thermal envelope shall be enclosed in an insulated (R-19 minimum) shaft. The portion of the vent system that is above the last roof and its projected plane need not be enclosed. The portion of the venting system passing through an attic space need not be insulated or enclosed.
- **37.** Vent terminations that penetrate a metal roof with a pitch shall be protected by an ice dam or deflector.
- **38.**Gypsum Wall Board (sheetrock) shall be considered a noncombustible material when determining minimum required clearances. It should be noted that GWB cannot be used to reduce clearances to combustibles. For example, B vent must be installed with a one inch minimum clearance from wood, even if the wood is covered with GWB.
- 39. The maximum length of a clothes dryer exhaust duct may be increased when necessary due to location of the dryer in relationship to an exterior wall or roof, not to exceed the dryer manufacturer's recommendations. When exceeding the maximum allowable length per code, a placard stating the length of the run and the amount of 90 degree elbows must be posted on the wall next to the dryer exhaust connection. The placard must be laminated or in a moisture resistant sleeve and be secured using screws, staples, or thumbtacks. Push pins are not acceptable. The duct must be routed using the shortest possible distance to the exterior.
- **40.** For distances exceeding the dryer manufacturer's recommendations, a booster fan, listed for the purpose, shall be used for lengths up to the booster fan manufacturer's recommendations.
- **41.** Ventilating hoods shall be installed over all domestic free standing or built-in ranges, unless the range is otherwise listed for forced down draft ventilation. The hood or ventilation system shall exhaust to exterior of the building.